

Ehlert, Martin

**Article — Accepted Manuscript (Postprint)**

## Who Benefits from Training Courses in Germany? Monetary Returns to Non-formal Further Education on a Segmented Labour Market

European Sociological Review

**Provided in Cooperation with:**  
WZB Berlin Social Science Center

*Suggested Citation:* Ehlert, Martin (2017) : Who Benefits from Training Courses in Germany? Monetary Returns to Non-formal Further Education on a Segmented Labour Market, European Sociological Review, ISSN 1468-2672, Oxford University Press, Oxford, Vol. 33, Iss. 3, pp. 436-448,  
<https://doi.org/10.1093/esr/jcx042>

This Version is available at:  
<https://hdl.handle.net/10419/215705>

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# Online Appendix for “Who Benefits from Training Courses in Germany? Monetary Returns to Non-Formal Further Education on a Segmented Labor Market”

KLD B2010	DESCRIPTION	OCCUPATIONAL CLOSURE
712	Legislators and senior officials of special interest organisations	0
14	Armed forces personnel in other ranks	.7
611	Occupations in purchasing and sales	2
541	Occupations in cleaning services	2
271	Occupations in technical research and development	2.7
711	Managing directors and executive board members	3.1
433	Occupations in IT-network engineering, IT-coordination, IT-administration and IT-organisation	3.1
341	Occupations in building services engineering	4.2
525	Drivers and operators of construction and transportation vehicles and equipment	4.2
514	Service occupations in passenger traffic	4.6
432	Occupations in IT-system-analysis, IT-application-consulting and IT-sales	5.3
843	Teachers and researcher at universities and colleges	7.9
921	Occupations in advertising and marketing	8.3

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KldB2010 code	Description	Occupational closure
622	Sales occupations (retail trade) selling clothing, electronic devices, furniture, motor vehicles and other durables	9.7
434	Occupations in software development and programming	10
844	Teachers at educational institutions other than schools (except driving, flying and sports instructors)	11.2
715	Occupations in human resources management and personnel service	11.7
243	Occupations in treatment of metal surfaces	13.2
722	Occupations in accounting, controlling and auditing	13.8
241	Occupations in metal-making	14.4
521	Driver of vehicles in road traffic	14.5
273	Technical occupations in production planning and scheduling	15.3
343	Occupations in building services and waste disposal	15.5
922	Occupations in public relations	16.6
633	Gastronomy occupations	17.4
513	Occupations in warehousing and logistics, in postal and other delivery services, and in cargo handling	17.8
112	Occupations in animal husbandry	23.3
924	Occupations in editorial work and journalism	23.9
613	Occupations in real estate and facility management	24.5
515	Occupations in traffic surveillance and control	25
516	Management assistants in transport and logistics	26
621	Sales occupations in retail trade (without product specialisation)	26.3
632	Occupations in hotels	27
221	Occupations in plastic- and rubber-making and -processing	27.7

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KldB2010 code	Description	Occupational closure
623	Sales occupations (retail) selling food-stuffs	28.9
913	Occupations in the social sciences	30.2
212	Conditioning and processing of natural stone and minerals, production of building materials	31
624	Sales occupations (retail) selling drugstore products, pharmaceuticals, medical supplies and healthcare goods	31
322	Occupations in civil engineering	31.1
832	Occupations in housekeeping and consumer counselling	32.8
842	Teachers for occupation-specific subjects at vocational schools and in-company instructors in vocational training	33.7
713	Occupations in business organisation and strategy	33.8
612	Trading occupations	34.6
531	Occupations in physical security, personal protection, fire protection and workplace safety	38.2
242	Occupations in metalworking	38.4
213	Occupations in industrial glass-making and -processing	39.6
251	Occupations in machine-building and -operating	39.9
714	Office clerks and secretaries	40.8
512	Occupations in the inspection and maintenance of traffic infrastructure	41
933	Occupations in artisan craftwork and fine arts	41.1
244	Occupations in metal constructing and welding	42.3
333	Occupations in the interior construction and dry walling, insulation, carpentry, glazing, roller shutter and jalousie installation	42.8
222	Occupations in colour coating and varnishing	43.8

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KldB2010 code	Description	Occupational closure
945	Occupations in event technology, cinematography, and sound engineering	44.3
631	Occupations in tourism and the sports (and fitness) industry	46.5
261	Occupations in mechatronics, automation and control technology	47.6
625	Sales occupations (retail) selling books, art, antiques, musical instruments, recordings or sheet music	48.3
292	Occupations in the production of food-stuffs, confectionery and tobacco products	48.9
733	Occupations in media, documentation and information services	49.3
293	Cooking occupations	50.7
732	Occupations in public administration	52.9
272	Draftspersons, technical designers, and model makers	54.1
821	Occupations in geriatric care	54.2
311	Occupations in construction scheduling and supervision, and architecture	54.4
234	Occupations in printing technology, print finishing, and book binding	54.9
431	Occupations in computer science	55.1
263	Occupations in electrical engineering	55.5
232	Occupations in technical media design	56
532	Occupations in police and criminal investigation, jurisdiction and the penal institution	56.1
414	Occupations in physics	56.6
252	Technical occupations in the automotive, aeronautic, aerospace and ship building industries	56.8
281	Occupations in textile making	57.4
845	Driving, flying and sports instructors at educational institutions other than schools	58.2
412	Occupations in biology	59.4
121	Occupations in gardening	59.8
223	Occupations in wood-working and -processing	60.9

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KldB2010 code	Description	Occupational closure
282	Occupations in the production of clothing and other textile products	61.2
413	Occupations in chemistry	61.7
721	Occupations in insurance and financial services	65
111	Occupations in farming	66.5
262	Technical occupations in energy technologies	69.6
321	Occupations in building construction	69.7
342	Occupations in plumping, sanitation, heating, ventilating, and air conditioning	70.3
331	Floor layers	71.5
312	Occupations in surveying and cartography	72.1
825	Technical occupations in medicine, orthopaedic and rehabilitation	72.3
833	Occupations in theology and church community work	72.5
723	Occupations in tax consultancy	73.9
245	Occupations in precision mechanics and tool making	75.1
831	Occupations in education and social work, and pedagogic specialists in social care work	75.2
816	Occupations in psychology and non-medical psychotherapy	75.4
818	Occupations in pharmacy	76.2
117	Occupations in forestry, hunting and landscape preservation	76.4
812	Laboratory occupations in medicine	77.7
811	Doctors' receptionists and assistants	78.5
332	Painters and varnishers, plasterers, occupations in the waterproofing of buildings, preservation of structures and wooden building components	79.4
823	Occupations in body care	79.6
122	Occupations in floristry	79.8
841	Teachers in schools of general education	83.9
813	Occupations in nursing, emergency medical services and obstetrics	84.7

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KldB2010 code	Description	<i>Continued from previous page</i>
		Occupational closure
731	Occupations in legal services, jurisdiction, and other officers of the court	88.7
817	Occupations in non-medical therapy and alternative medicine	89.5
814	Occupations in human medicine and dentistry	95.8

Table A.1: Estimated closure of 3-digit KldB 2010 occupations. Source: NEPS SC6, own calculations

	Em.-fin. man.	Em.-fin. vol.	Wk.-fin. man.	Wk.-fin. vol.	Private
Empl.-fin. man.	1.0000				
Empl.-fin. vol.	0.2089	1.0000			
Wk.-fin. man.	0.0622	0.0435	1.0000		
Wk.-fin. vol.	0.0852	0.1214	0.0891	1.0000	
Private	0.0963	0.1204	0.0368	0.0614	1.0000

Table A.2: Correlation matrix of participation in different types of courses. Source: NEPS SC6, own calculations

	Empl.-fin. mandatory	Empl.-fin. voluntary	Worker-fin. mandatory	Worker-fin. voluntary	Private
Production, processing, construction, farming	.12	.1	.12	.06	.08
Business, administration	.24	.25	.11	.08	.07
Service, transport, hotel, restaurant	.05	.04	.05	.03	.12
Information technology	.11	.13	.03	.06	.04
Science, research, development	.02	.04	.04	.04	.02
Social affairs, education, health, sport	.3	.3	.47	.5	.34
Media, art, design	.01	.02	.04	.07	.13
Languages	.01	.04	.04	.1	.14
Modes of working, products, locations, sectors	.05	.04	.03	.02	.02
Licenses, qualifications	.05	.02	.06	.02	.04
Soft skills	.03	.03	.01	.01	.01

Table A.3: Content of the courses by type of course. Column percentages. Source: NEPS SC6, own calculations



	(1)
Empl.-financed mandatory	0.012* (0.0057)
Empl.-financed mandatory Sq.	-0.00063* (0.00029)
Worker-financed mandatory	0.0016 (0.022)
Worker-financed mandatory Sq.	-0.00017 (0.0010)
Empl.-financed voluntary	-0.0026 (0.0037)
Empl.-financed voluntary Sq.	0.00013 (0.00020)
Worker-financed voluntary	-0.0023 (0.0049)
Worker-financed voluntary Sq.	0.000095 (0.00018)
Private	-0.0020 (0.0019)
Private Sq.	0.000049 (0.000046)
Tenure	-0.00018 (0.00012)
Tenure Sq.	0.0000011** (0.00000035)
Employment experience	0.0061*** (0.0010)
Employment experience Sq.	-0.0000059*** (0.00000051)
Yrs. of Education	0.040+ (0.022)
Work hours	-0.018*** (0.00031)
Temporary emp.	-0.050*** (0.012)
Household size	-0.0032 (0.0028)
No. of children in hh	0.0012 (0.0034)
Year 2010	-0.020+ (0.012)
Year 2011	-0.022 (0.021)
Year 2012	-0.031 (0.033)
Year 2013	-0.030 (0.041)
Observations	25697

Standard errors in parentheses

+  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A.4: The effect of non-formal training courses on log hourly wages. Full specification of the Fixed-effects model. Standard errors adjusted for clustering within individuals. Source: NEPS SC6, own calculations